

## Product datasheet

### Anti-alpha 1 Spectrin antibody [EPR9299] ab154811

Recombinant RabMAb

8 Images

#### Overview

<b>Product name</b>	Anti-alpha 1 Spectrin antibody [EPR9299]
<b>Description</b>	Rabbit monoclonal [EPR9299] to alpha 1 Spectrin
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P <b>Unsuitable for:</b> Flow Cyt, ICC/IF or IP
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide within Human alpha 1 Spectrin. The exact sequence is proprietary.
<b>Positive control</b>	K562 and TF-1 cell lysates; Human lung and stomach tissues
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at -20°C.
<b>Storage buffer</b>	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA</p>
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR9299

Isotype

IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab154811 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000 - 1/10000. Predicted molecular weight: 280 kDa.
IHC-P		1/250 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

### Application notes

Is unsuitable for Flow Cyt, ICC/IF or IP.

## Target

### Function

Spectrin is the major constituent of the cytoskeletal network underlying the erythrocyte plasma membrane. It associates with band 4.1 and actin to form the cytoskeletal superstructure of the erythrocyte plasma membrane.

### Involvement in disease

Defects in SPTA1 are the cause of elliptocytosis type 2 (EL2) [MIM:130600]. EL2 is a Rhesus-unlinked form of hereditary elliptocytosis, a genetically heterogeneous, autosomal dominant hematologic disorder. It is characterized by variable hemolytic anemia and elliptical or oval red cell shape.

Defects in SPTA1 are a cause of hereditary pyropoikilocytosis (HPP) [MIM:266140]. HPP is an autosomal recessive disorder characterized by hemolytic anemia, microspherocytosis, poikilocytosis, and an unusual thermal sensitivity of red cells.

Defects in SPTA1 are the cause of spherocytosis type 3 (SPH3) [MIM:270970]; also known as hereditary spherocytosis type 3 (HS3). Spherocytosis is a hematologic disorder leading to chronic hemolytic anemia and characterized by numerous abnormally shaped erythrocytes which are generally spheroidal. SPH3 is characterized by severe hemolytic anemia. Inheritance is autosomal recessive.

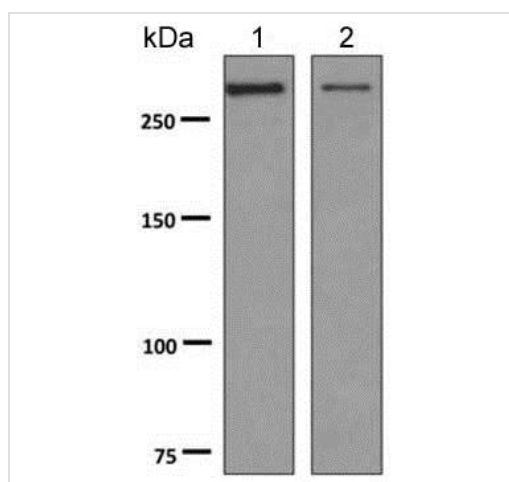
### Sequence similarities

Belongs to the spectrin family.  
Contains 3 EF-hand domains.  
Contains 1 SH3 domain.  
Contains 21 spectrin repeats.

### Cellular localization

Cytoplasm > cytoskeleton. Cytoplasm > cell cortex.

## Images



Western blot - Anti-alpha 1 Spectrin antibody  
[EPR9299] (ab154811)

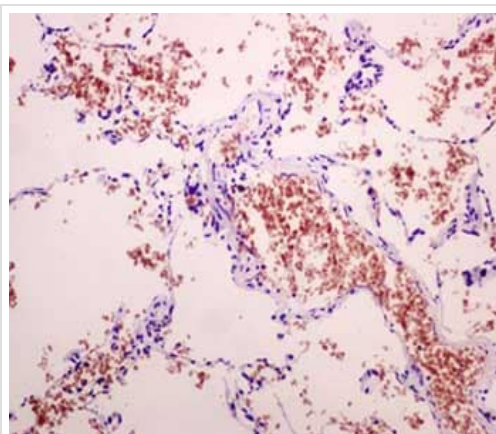
**All lanes :** Anti-alpha 1 Spectrin antibody [EPR9299] (ab154811)  
at 1/1000 dilution

**Lane 1 :** K562 cell lysate

**Lane 2 :** TF-1 cell lysate

Lysates/proteins at 10 µg per lane.

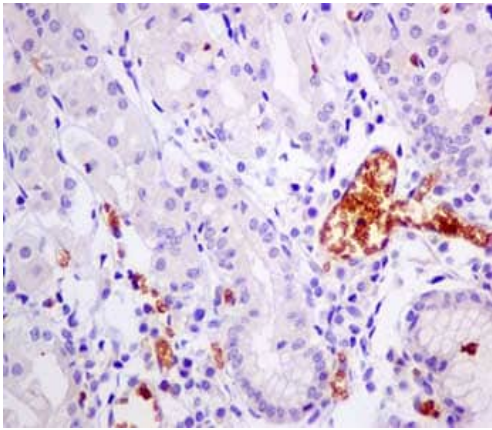
**Predicted band size:** 280 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-  
embedded sections) - Anti-alpha 1 Spectrin antibody  
[EPR9299] (ab154811)

Immunohistochemical analysis of paraffin-embedded Human lung  
tissue labeling alpha 1 Spectrin with ab154811 at 1/250 dilution.

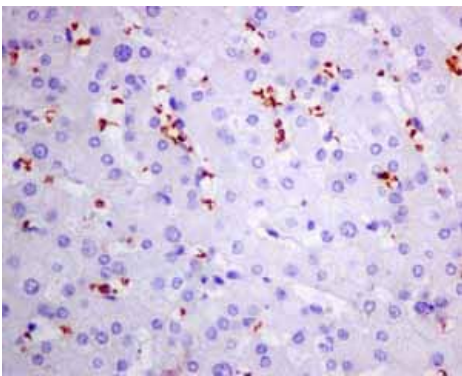
Perform heat mediated antigen retrieval with citrate buffer pH 6  
before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha 1 Spectrin antibody [EPR9299] (ab154811)

Immunohistochemical analysis of paraffin-embedded Human stomach tissue labeling alpha 1 Spectrin with ab154811 at 1/250 dilution.

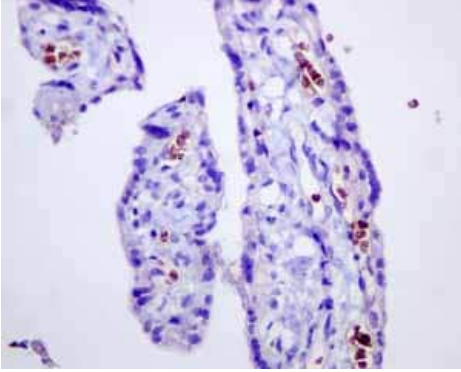
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha 1 Spectrin antibody [EPR9299] (ab154811)

Immunohistochemical analysis of paraffin embedded Human normal liver, erythrocytes tissue using ab154811 showing +ve staining.

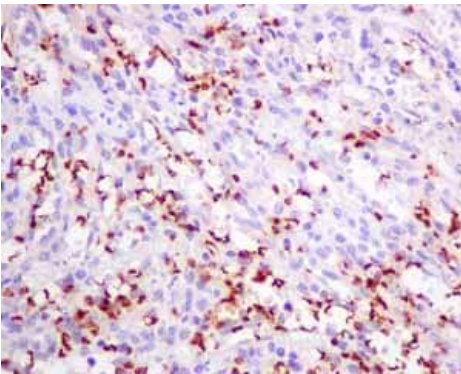
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha 1 Spectrin antibody [EPR9299] (ab154811)

Immunohistochemical analysis of paraffin embedded Human placenta, erythrocytes tissue using ab154811 showing +ve staining.

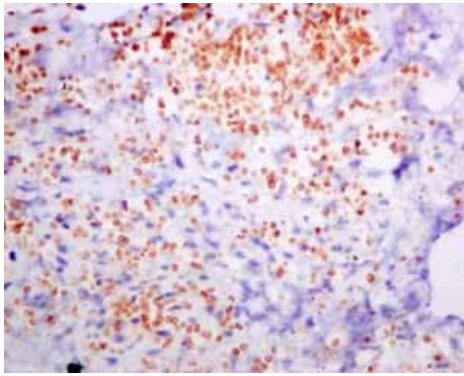
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha 1 Spectrin antibody [EPR9299] (ab154811)

Immunohistochemical analysis of paraffin embedded Human normal spleen, erythrocytes tissue using ab154811 showing +ve staining.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

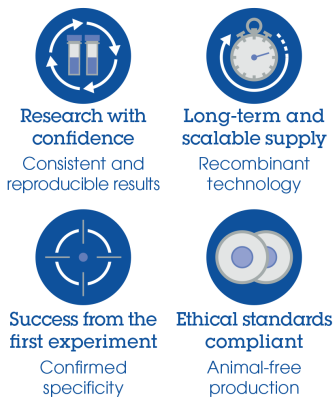


Immunohistochemical analysis of paraffin embedded Human normal uterus, erythrocytes tissue using ab154811 showing +ve staining.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha 1 Spectrin antibody [EPR9299] (ab154811)

### Why choose a recombinant antibody?



Anti-alpha 1 Spectrin antibody [EPR9299]  
(ab154811)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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